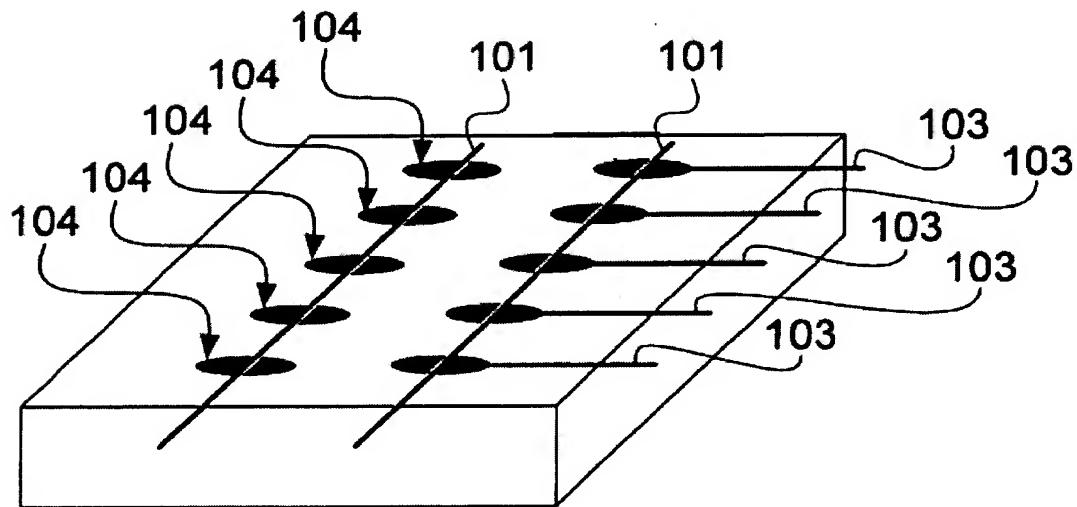
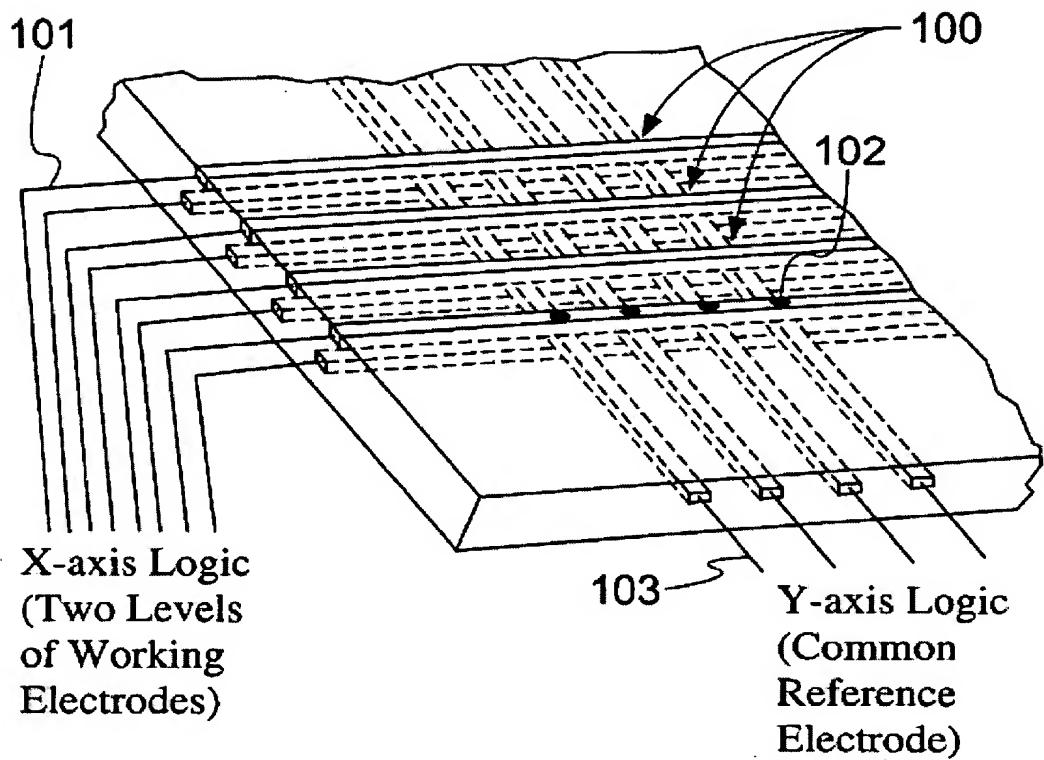


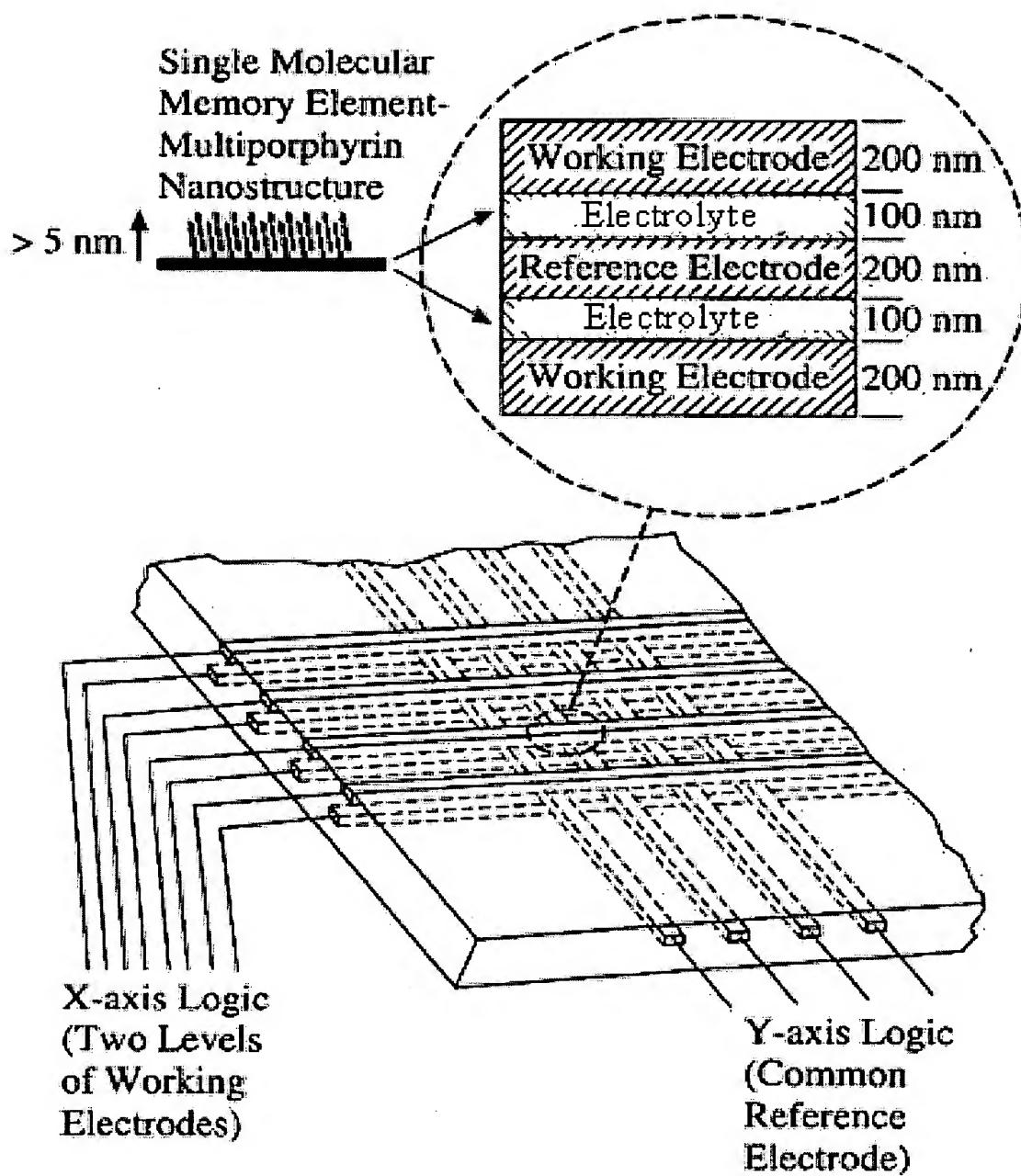
**Fig. 1**



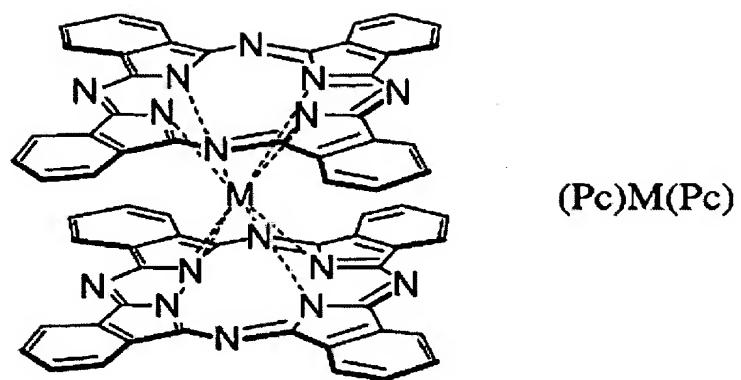
**Fig. 2**



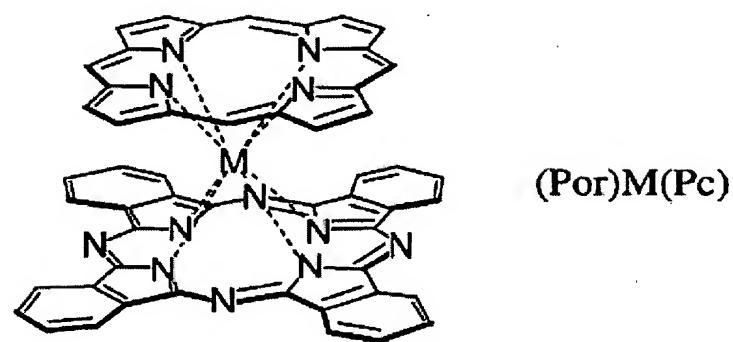
*Fig. 3*



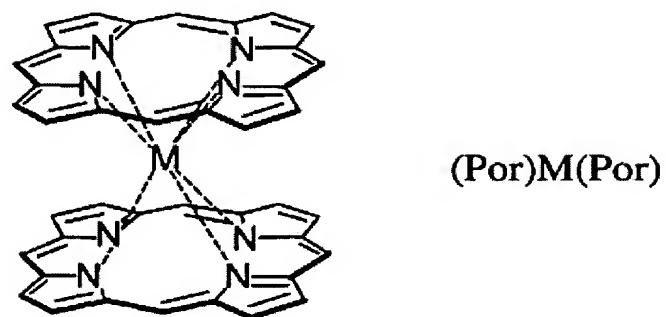
**Fig. 4**



(Pc)M(Pc)

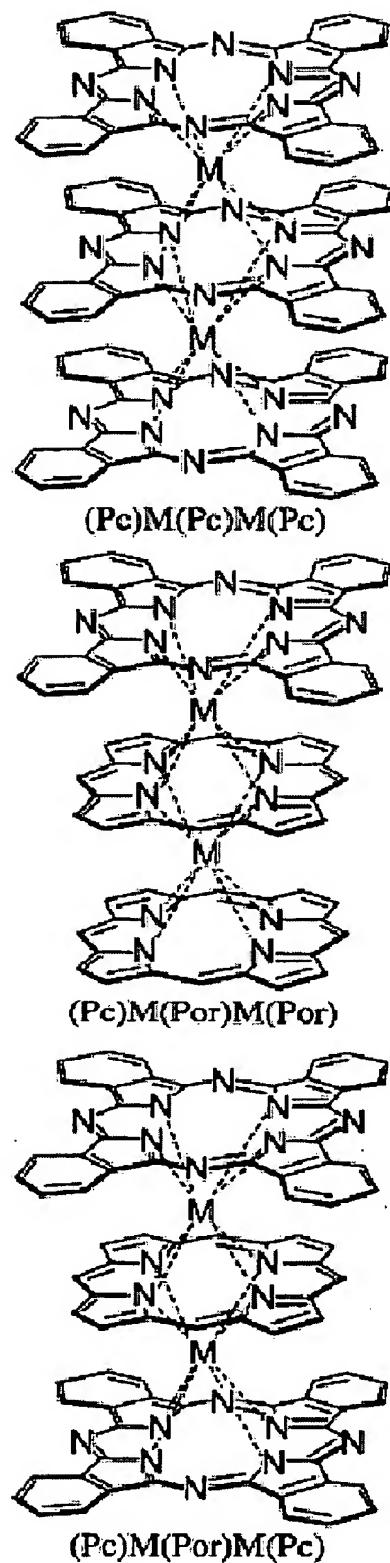
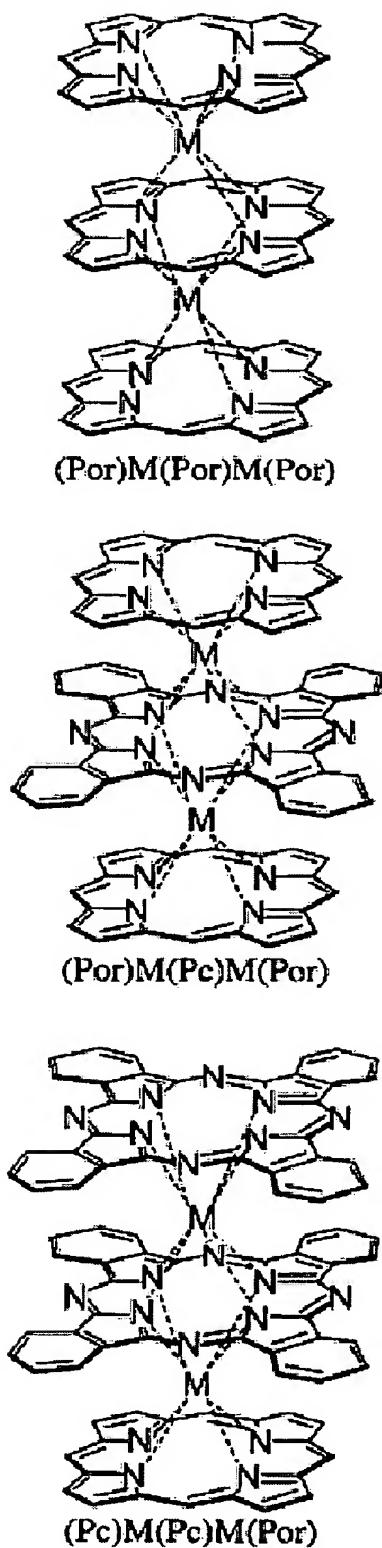


(Por)M(Pc)

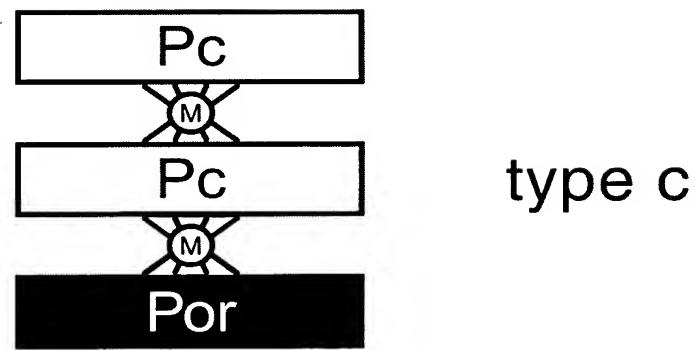
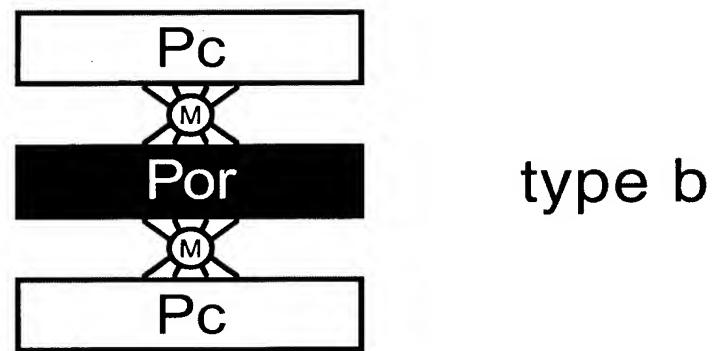
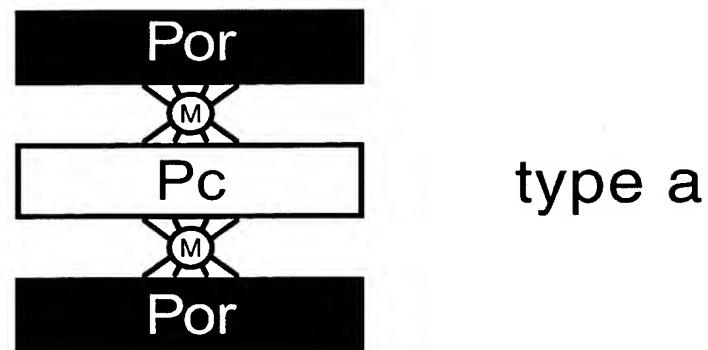


(Por)M(Por)

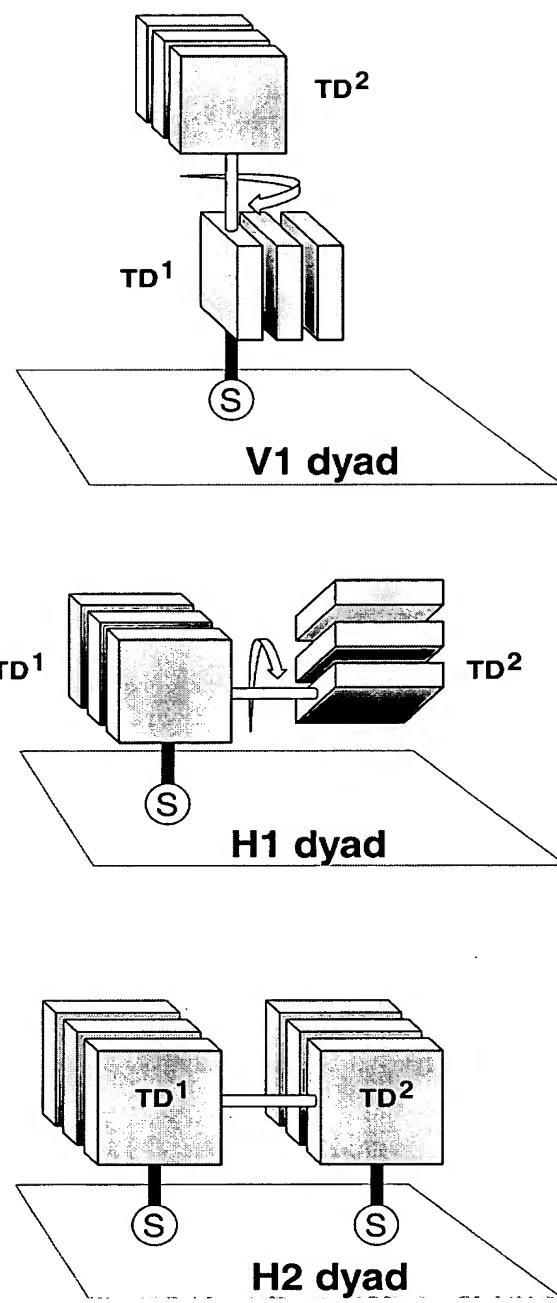
*Fig. 5*



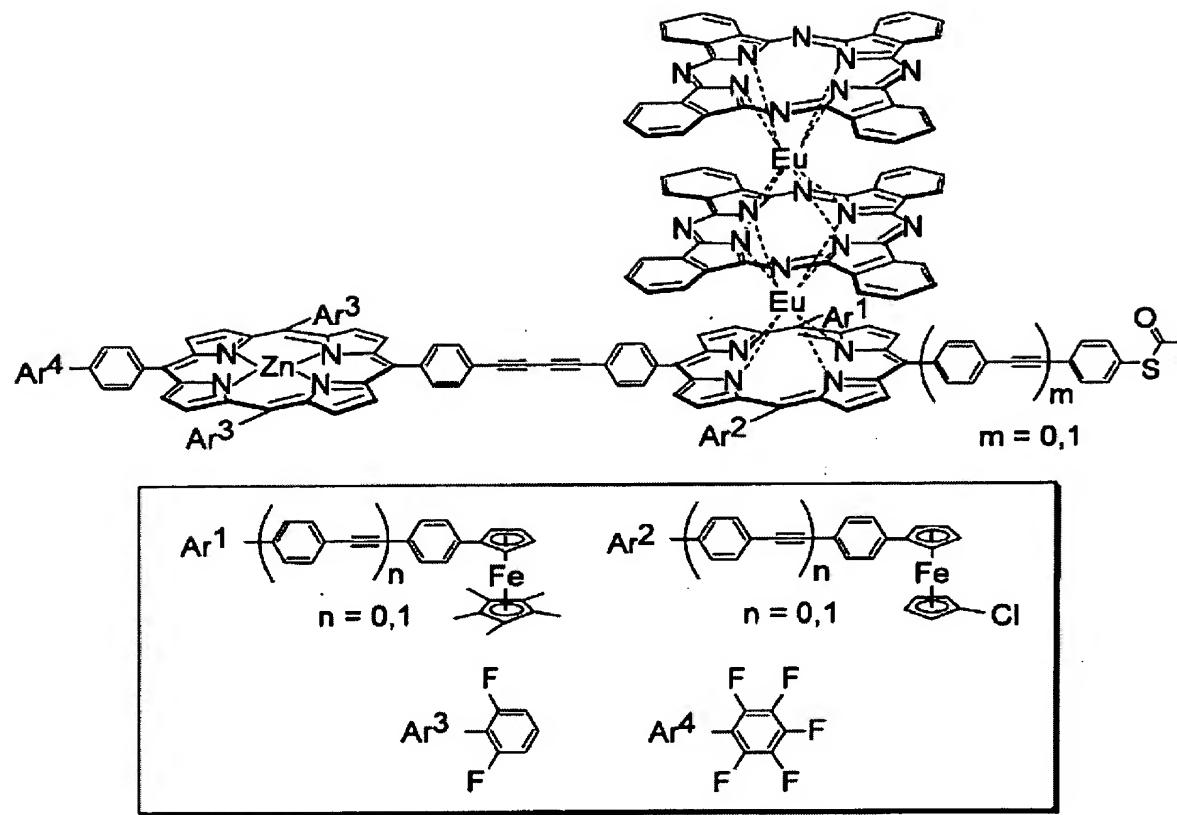
*Fig. 6*



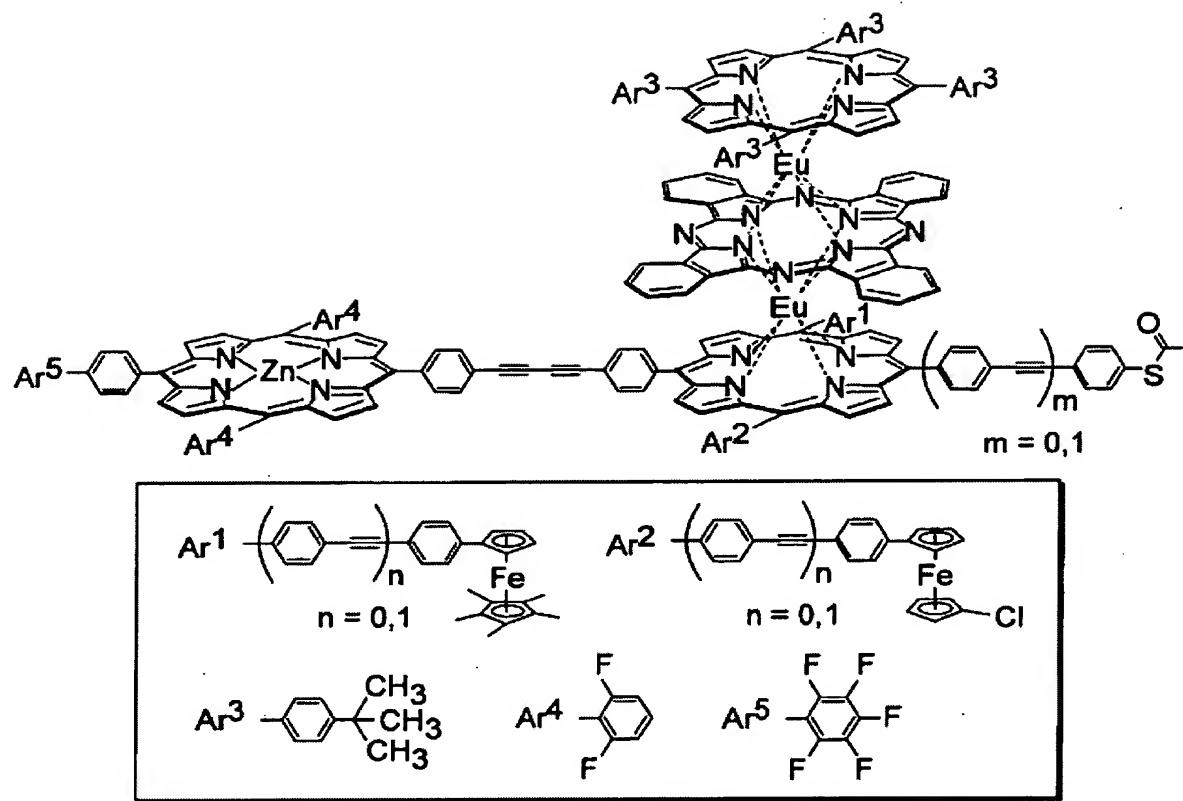
*Fig. 7*



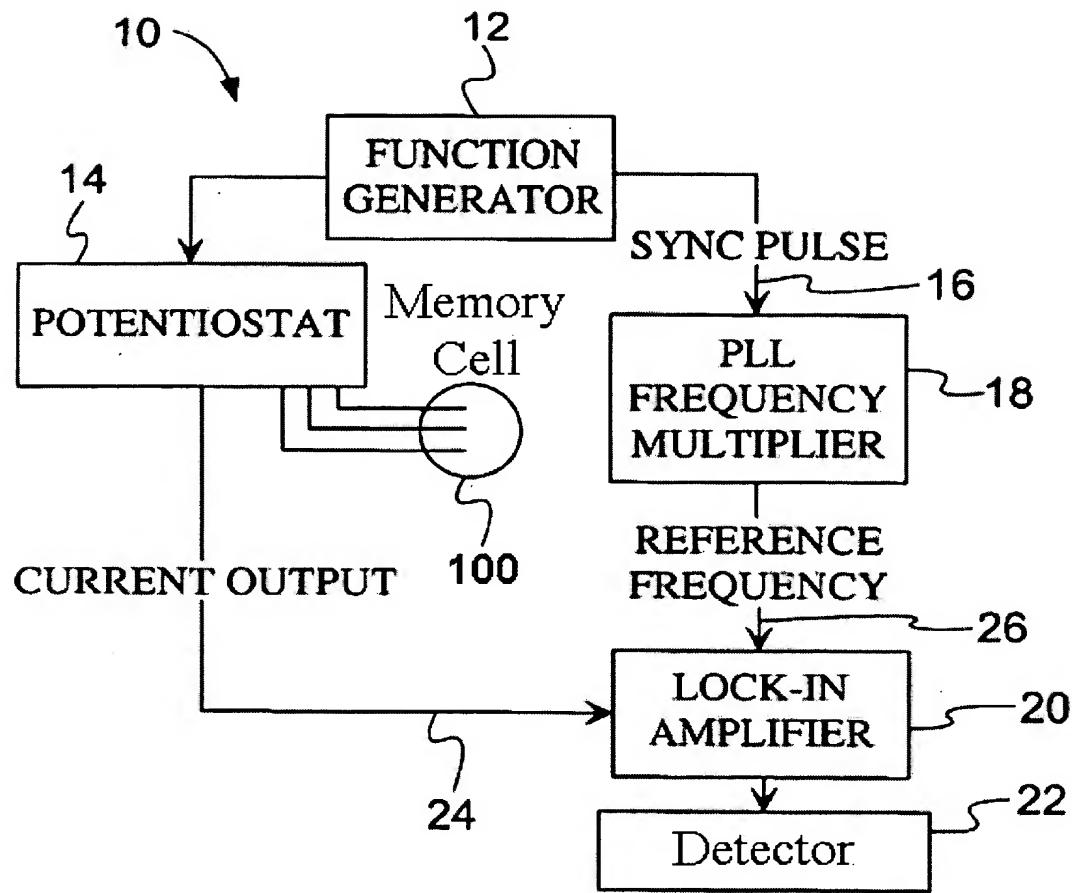
***Fig. 8***



*Fig. 9*

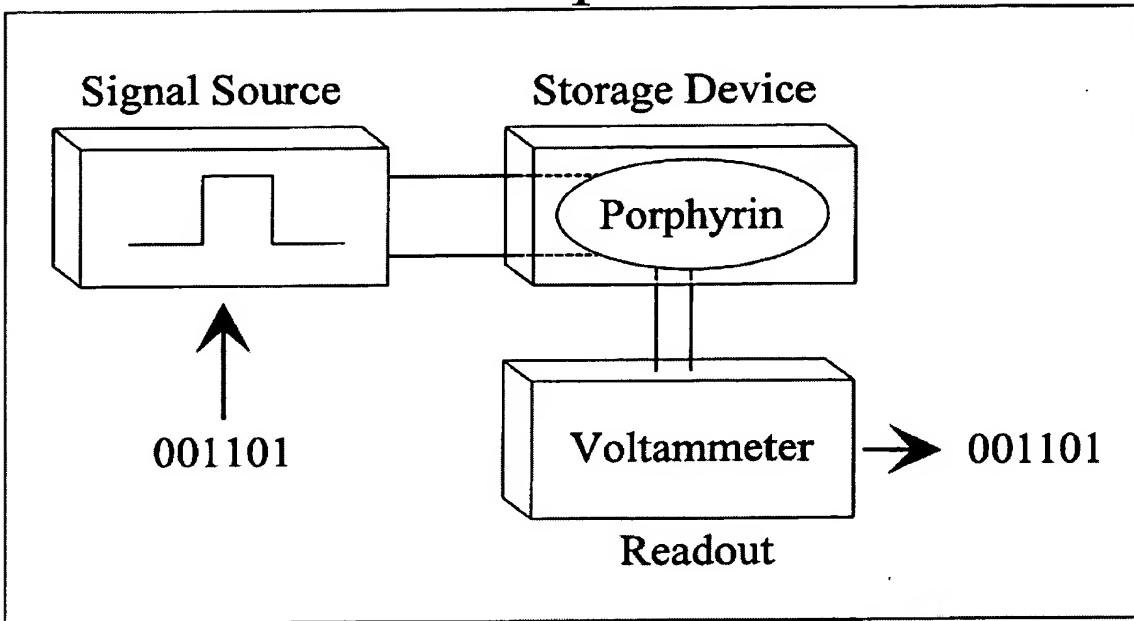


*Fig. 10*

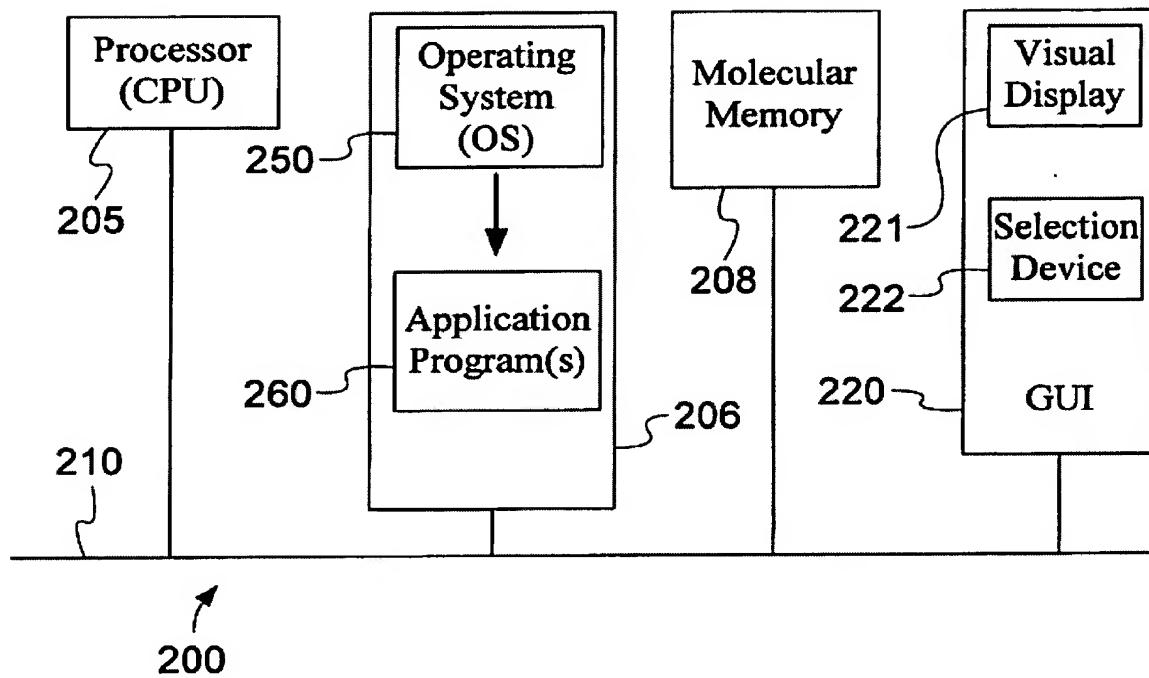


*Fig. 11*

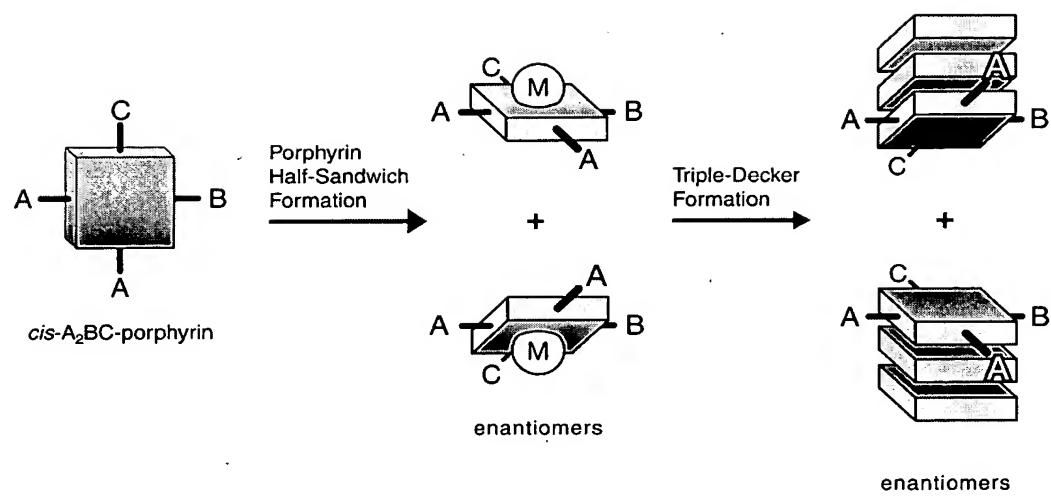
# Computer



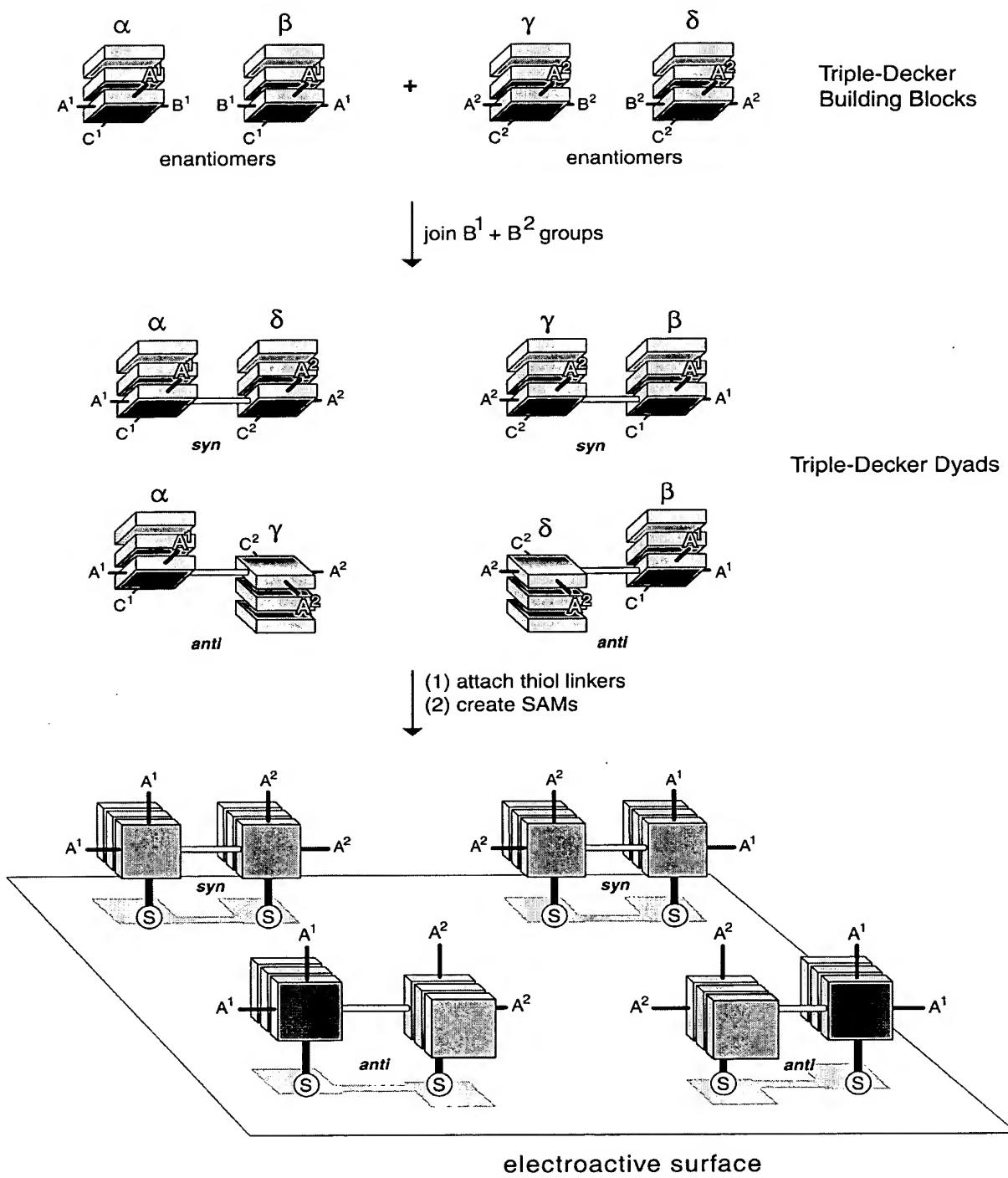
*Fig. 12*



**Fig. 13**

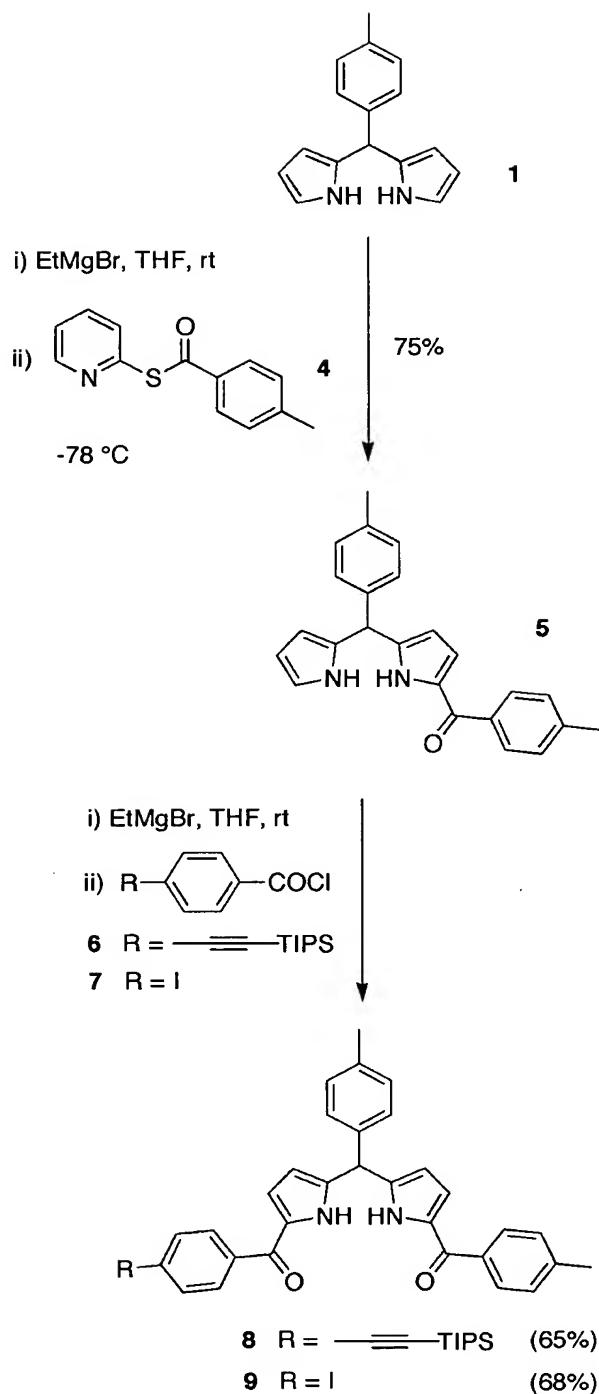


**Fig. 14**



**Fig. 15**

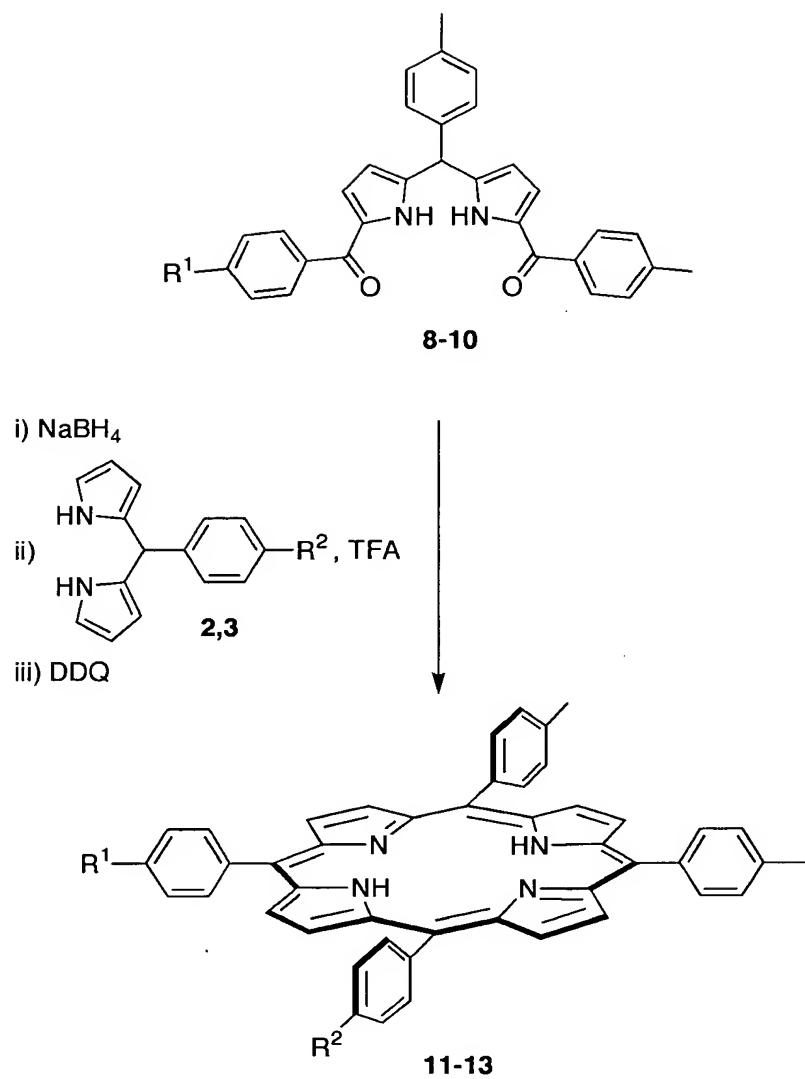
Scheme 1



**Fig. 16**

Scheme 2

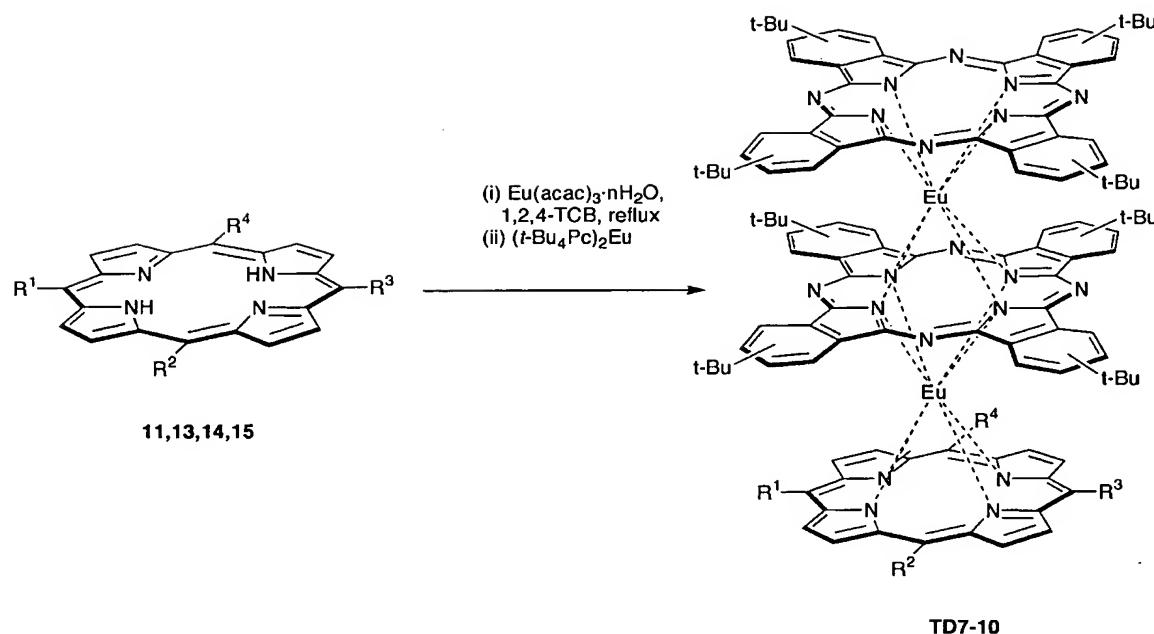
200 200 200 200 200 200



Precursors	R <sup>1</sup>	R <sup>2</sup>	Porphyrin
<b>8 + 2</b>	—TIPS	—TMS	<b>11 (20%)</b>
<b>9 + 2</b>	I	—TMS	<b>12 (21%)</b>
<b>10 + 3</b>	CH <sub>3</sub>	I	<b>13 (21%)</b>

**Fig. 17**

Scheme 3

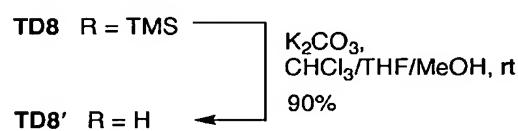
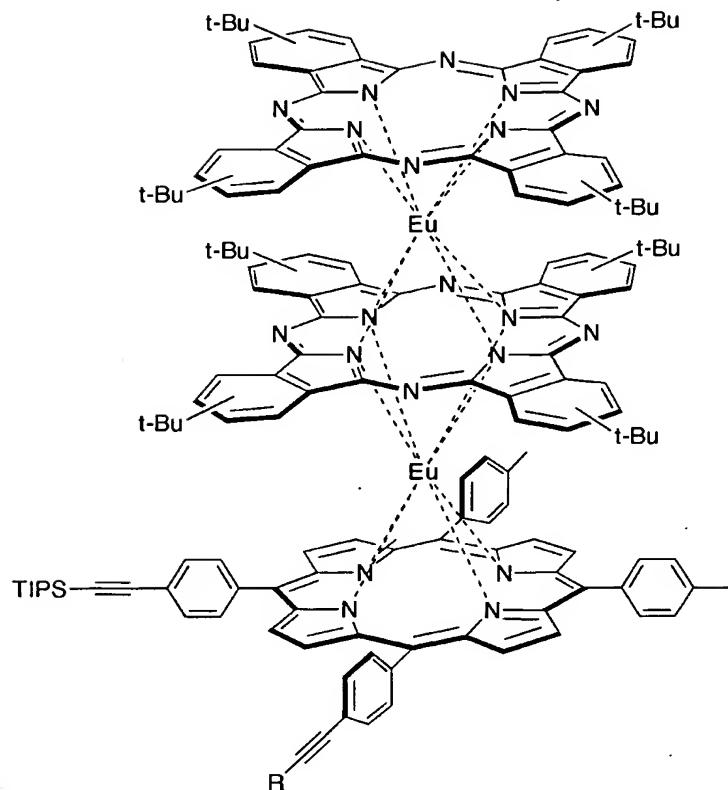


Porphyrin	R <sup>1</sup>	R <sup>2</sup>	R <sup>3</sup>	R <sup>4</sup>	Triple Decker	Yield
14		<i>p</i> -tolyl		<i>p</i> -tolyl	TD7	74%
11	<i>p</i> -tolyl			<i>p</i> -tolyl	TD8	79%
13	<i>p</i> -tolyl	<i>p</i> -tolyl		<i>p</i> -tolyl	TD9	62%
15	<i>n</i> -pentyl	<i>n</i> -pentyl		<i>n</i> -pentyl	TD10	25%

Fig. 18

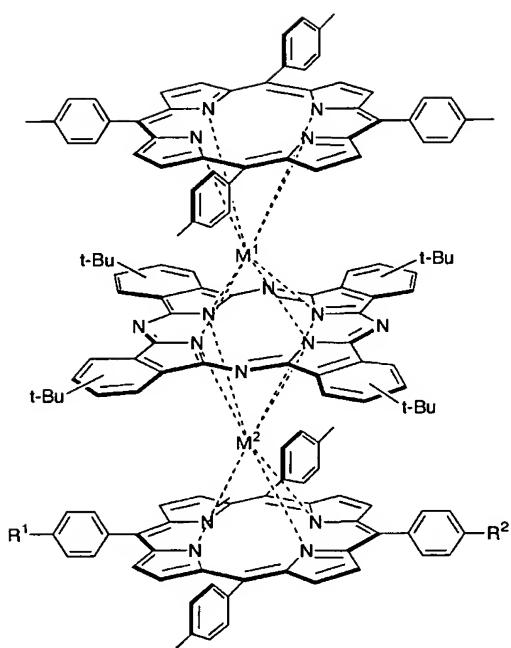
Scheme 4

2020-06-26 00:40:07

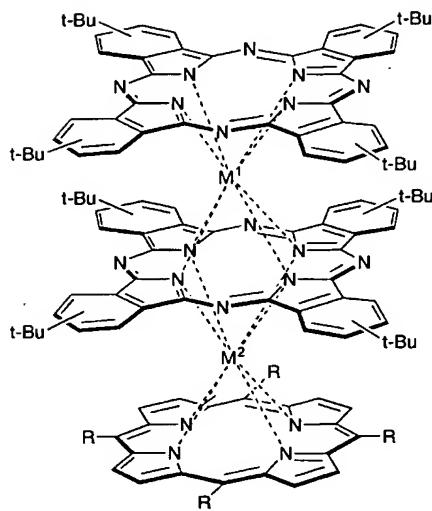


*Fig. 19*

Chart 1



Type\_a\_triple\_deckers

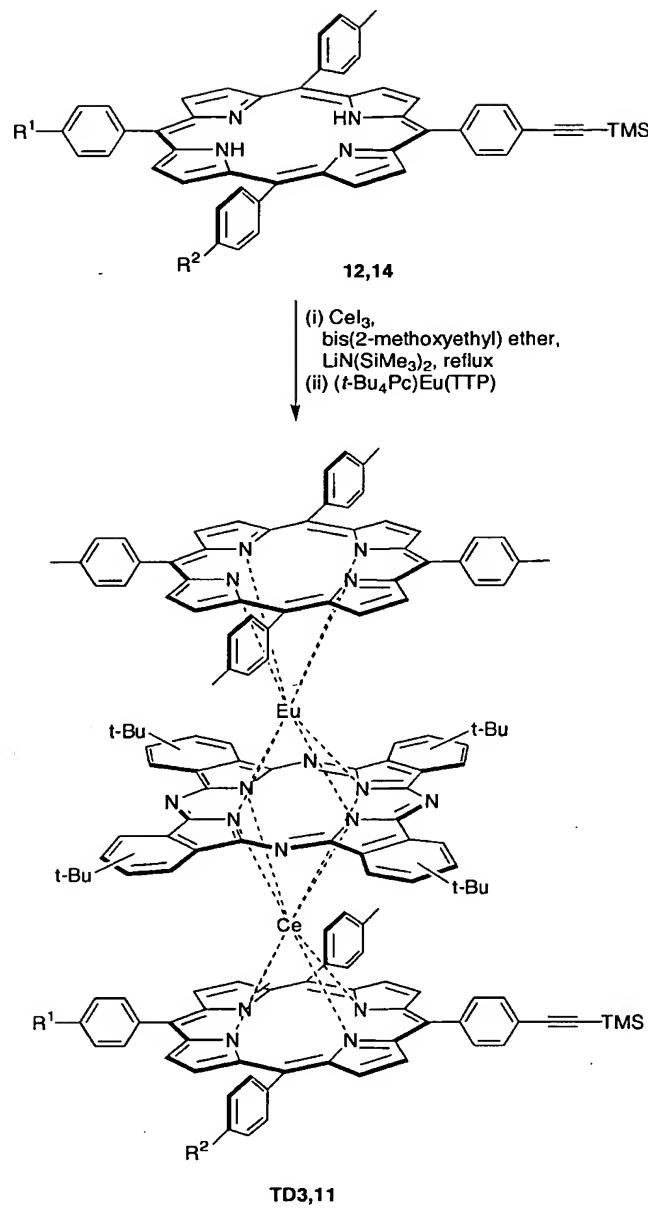
TD1  $M^1/M^2 = Eu$ ,  $R^1/R^2 = CH_3$ TD2  $M^1/M^2 = Ce$ ,  $R^1/R^2 = CH_3$ TD3  $M^1 = Eu$ ,  $M^2 = Ce$ ,  $R^1 = I$ ,  $R^2 = \text{---TMS}$ 

Type\_c\_triple\_deckers

TD4  $M^1/M^2 = Eu$ ,  $R = p\text{-tolyl}$ TD5  $M^1 = Eu$ ,  $M^2 = Ce$ ,  $R = p\text{-tolyl}$ TD6  $M^1/M^2 = Eu$ ,  $R = n\text{-pentyl}$ 

Fig. 20

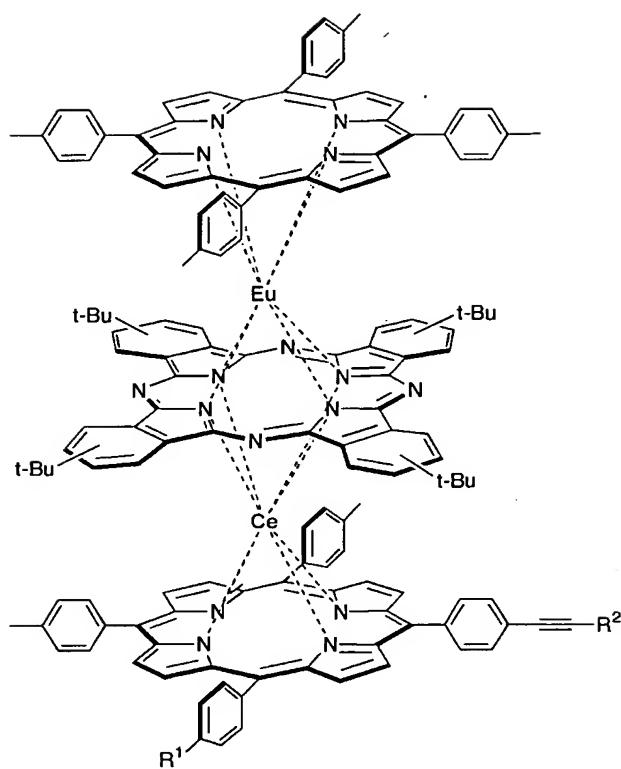
Scheme 5



Porphyrin	R <sup>1</sup>	R <sup>2</sup>	Triple Decker	Yield
<b>12</b>	CH <sub>3</sub>	I	<b>TD11</b>	54%
<b>14</b>	I	CH <sub>3</sub>	<b>TD3</b>	46%

**Fig. 21**

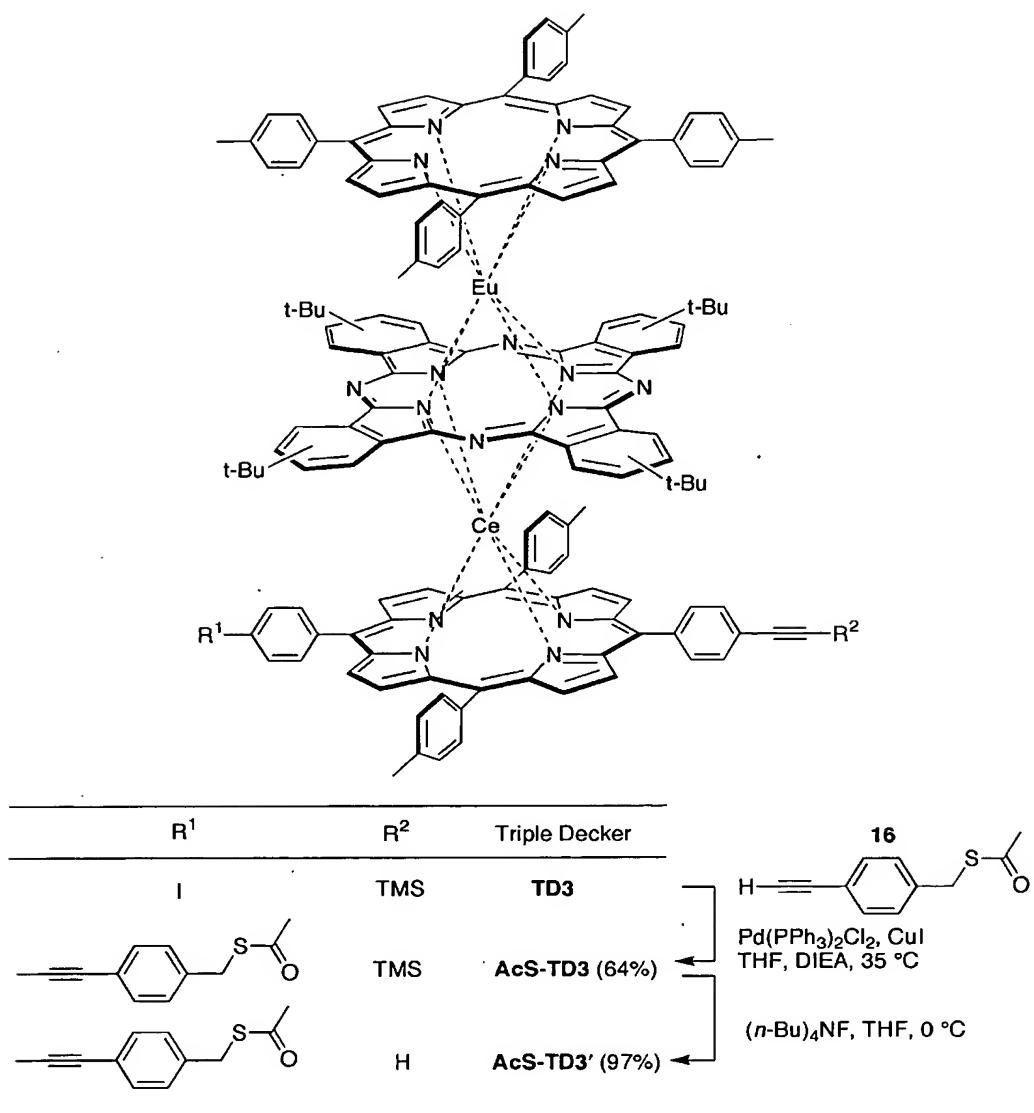
Scheme 6



R <sup>1</sup>	R <sup>2</sup>	Triple Decker	
I	TMS	TD11	<chem>CC(=O)Sc1ccc(cc1)C#Cc2ccc(cc2)C#Cc3ccc(cc3)SC(=O)C</chem> $16$ $\text{Pd}(\text{PPh}_3)_2\text{Cl}_2, \text{CuI}$ $\text{THF, TEA, } 35^\circ\text{C}$
<chem>CC(=O)Sc1ccc(cc1)C#Cc2ccc(cc2)C#Cc3ccc(cc3)SC(=O)C</chem>	H	AcS-TD11' (66%)	$(n\text{-Bu})_4\text{NF, THF, } 0^\circ\text{C}$

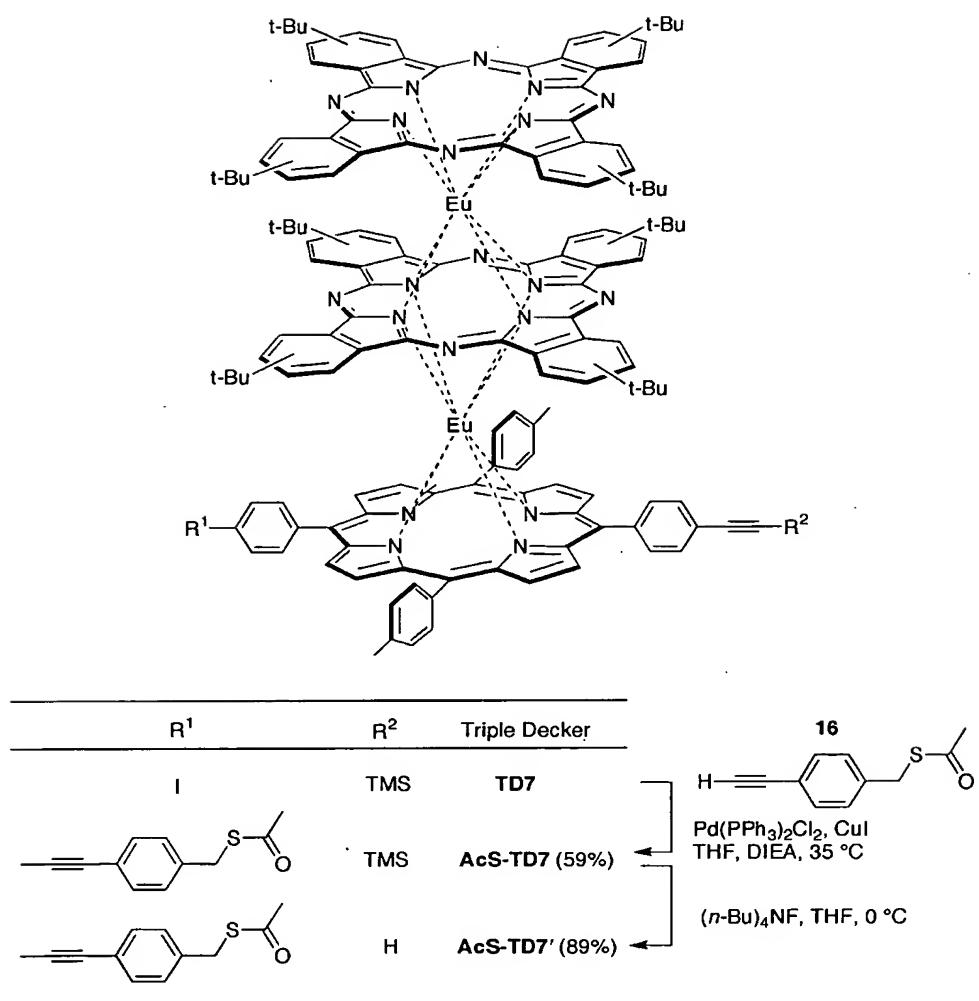
Fig. 22

Scheme 7



**Fig. 23**

Scheme 8



**Fig. 24**

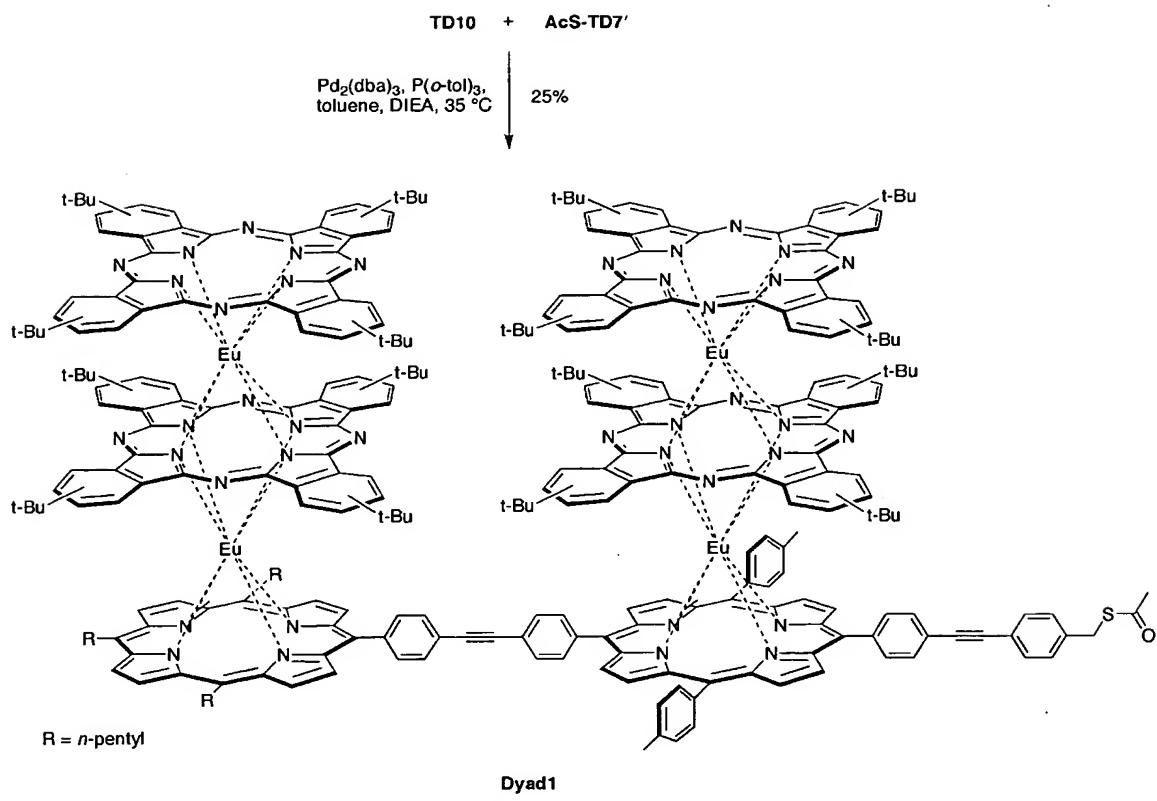
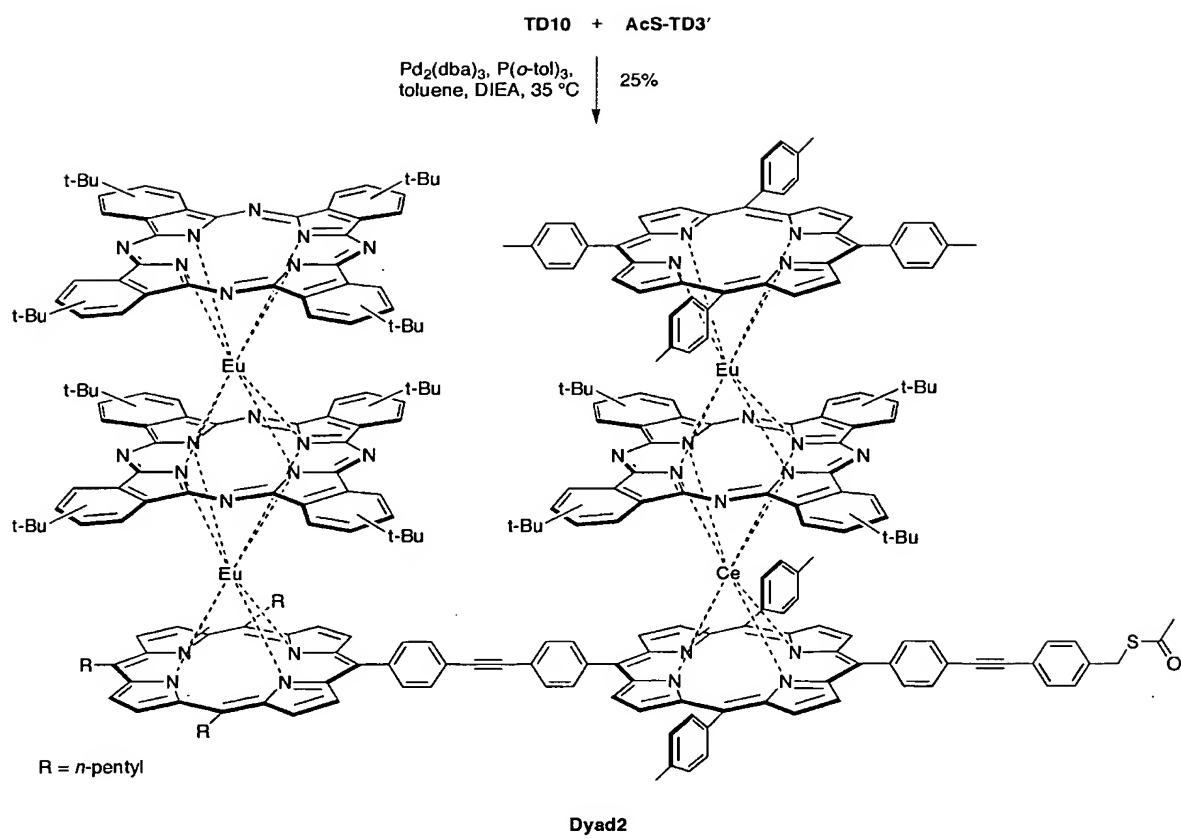
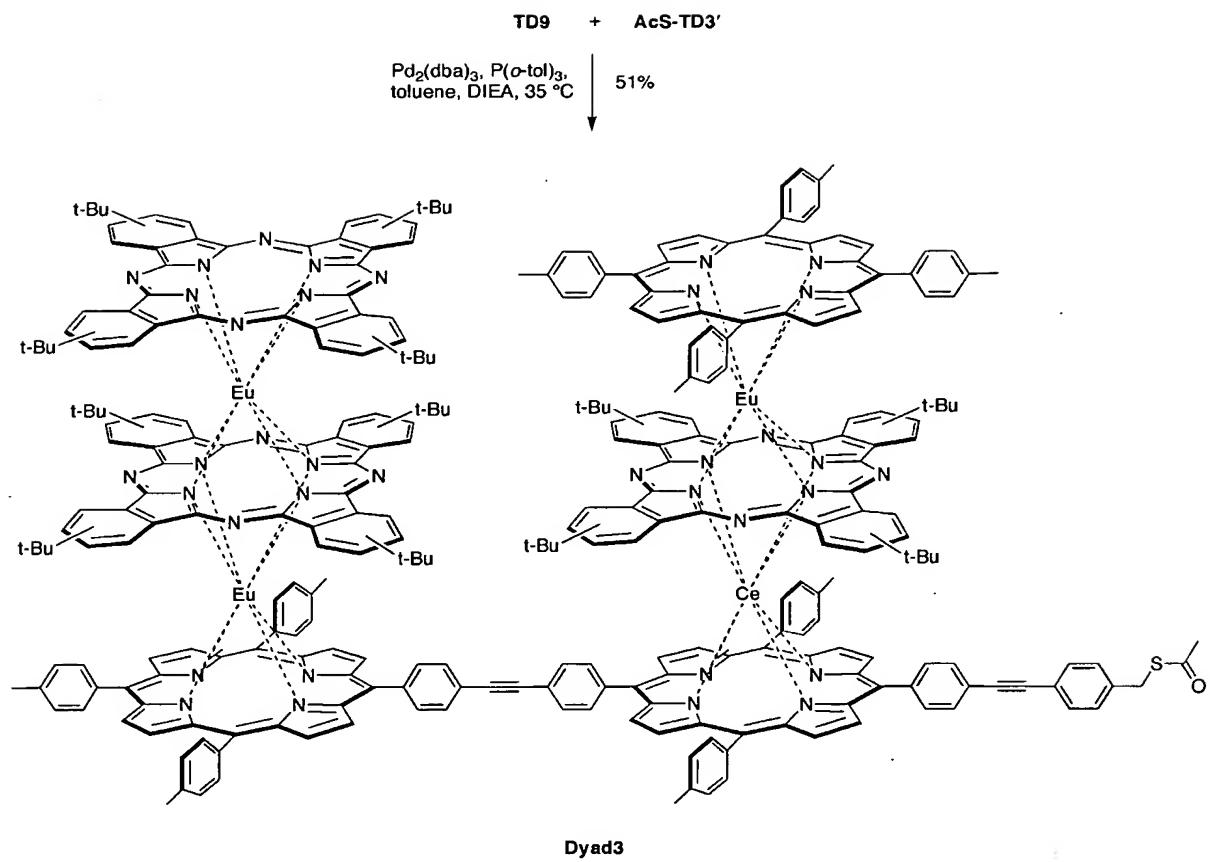


Fig. 25



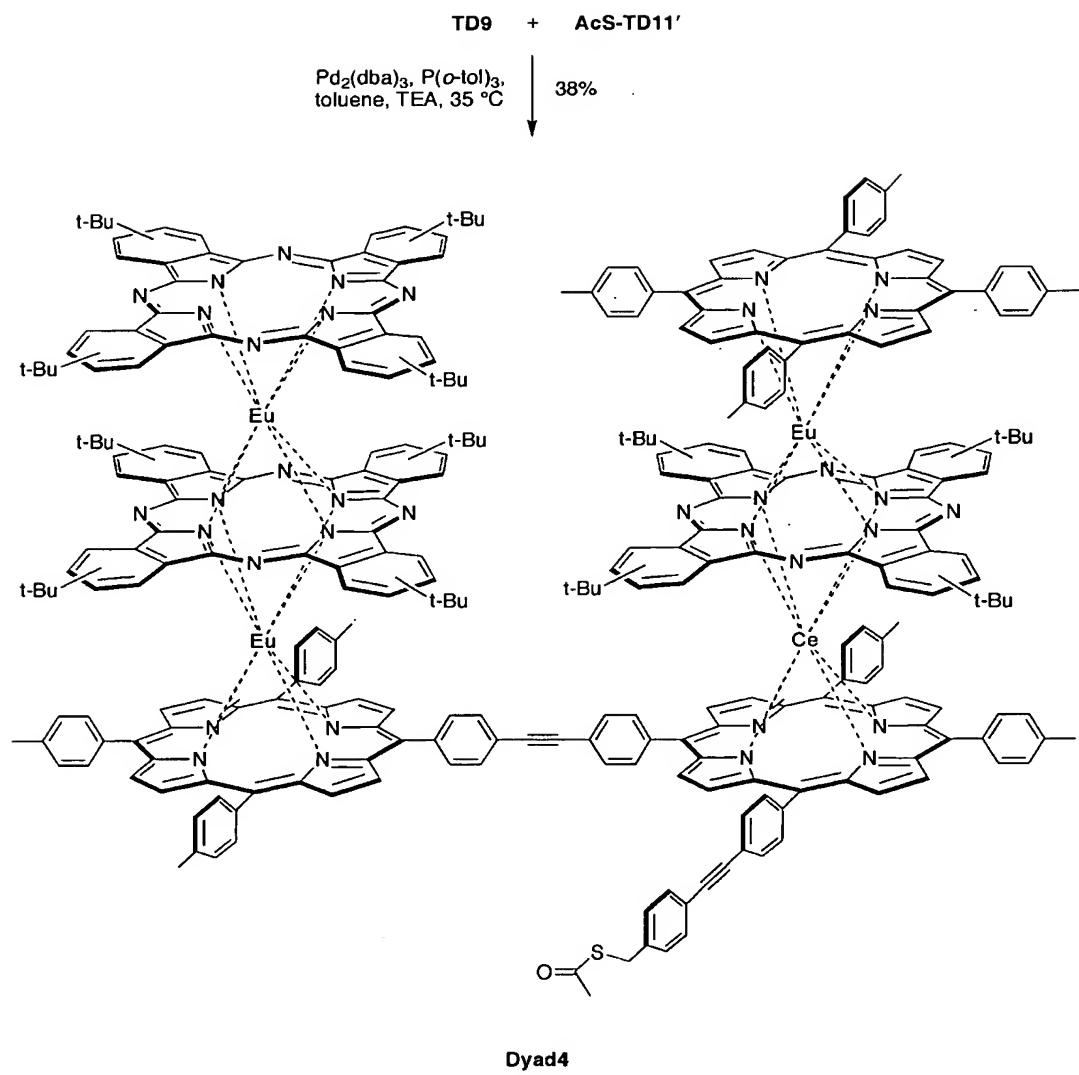
*Fig. 26*

Scheme 11



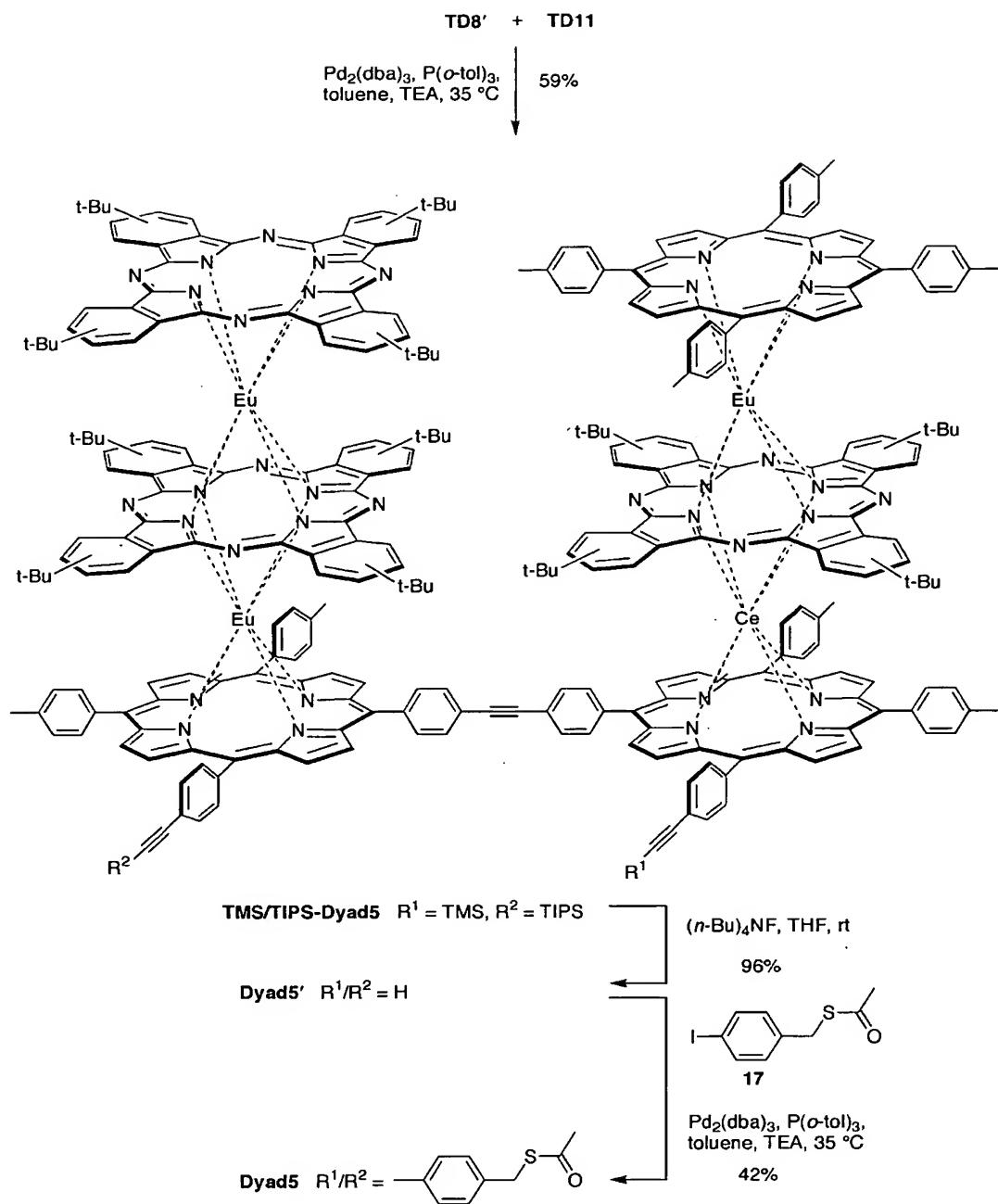
**Fig. 27**

Scheme 12

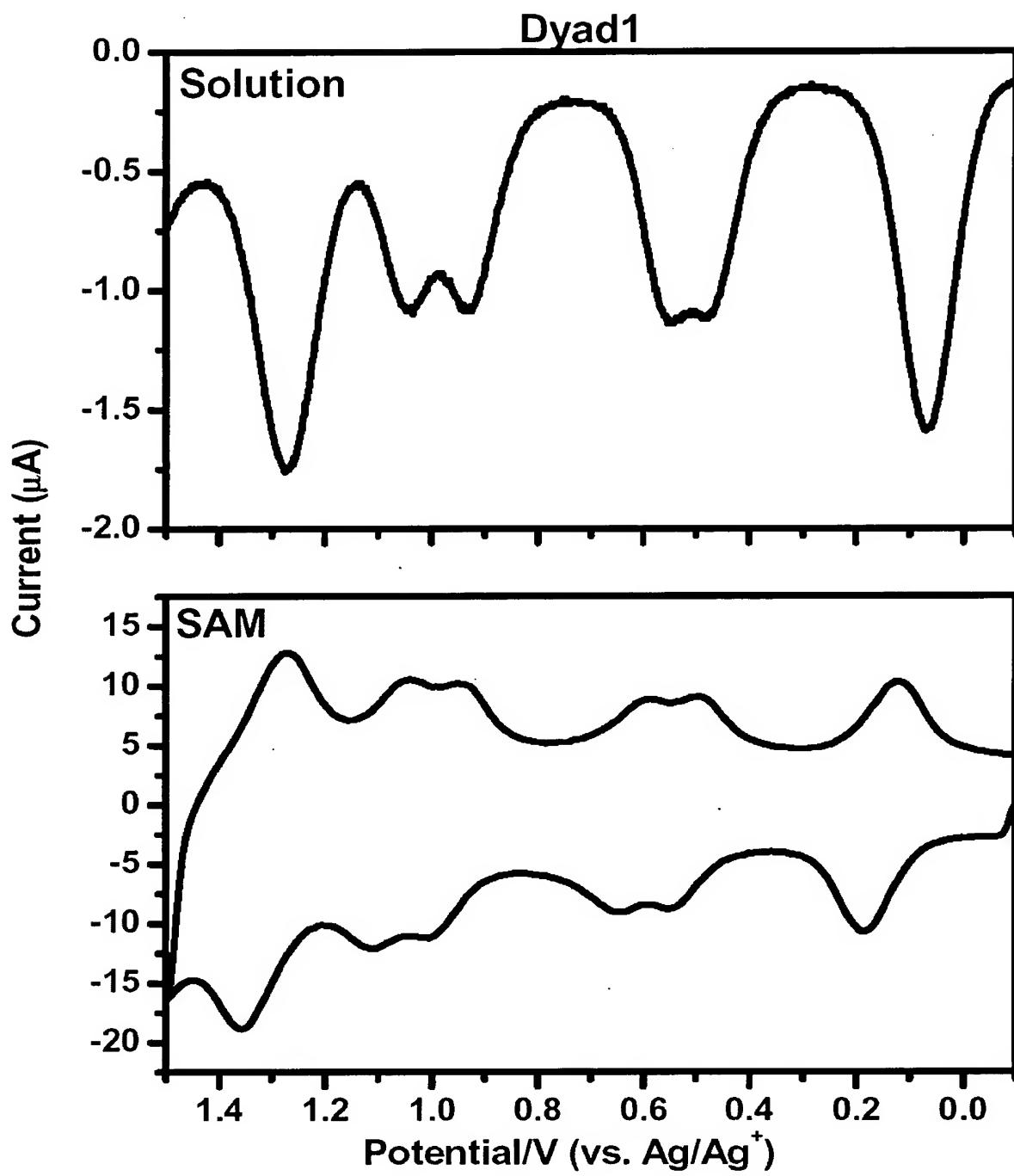


**Fig. 28**

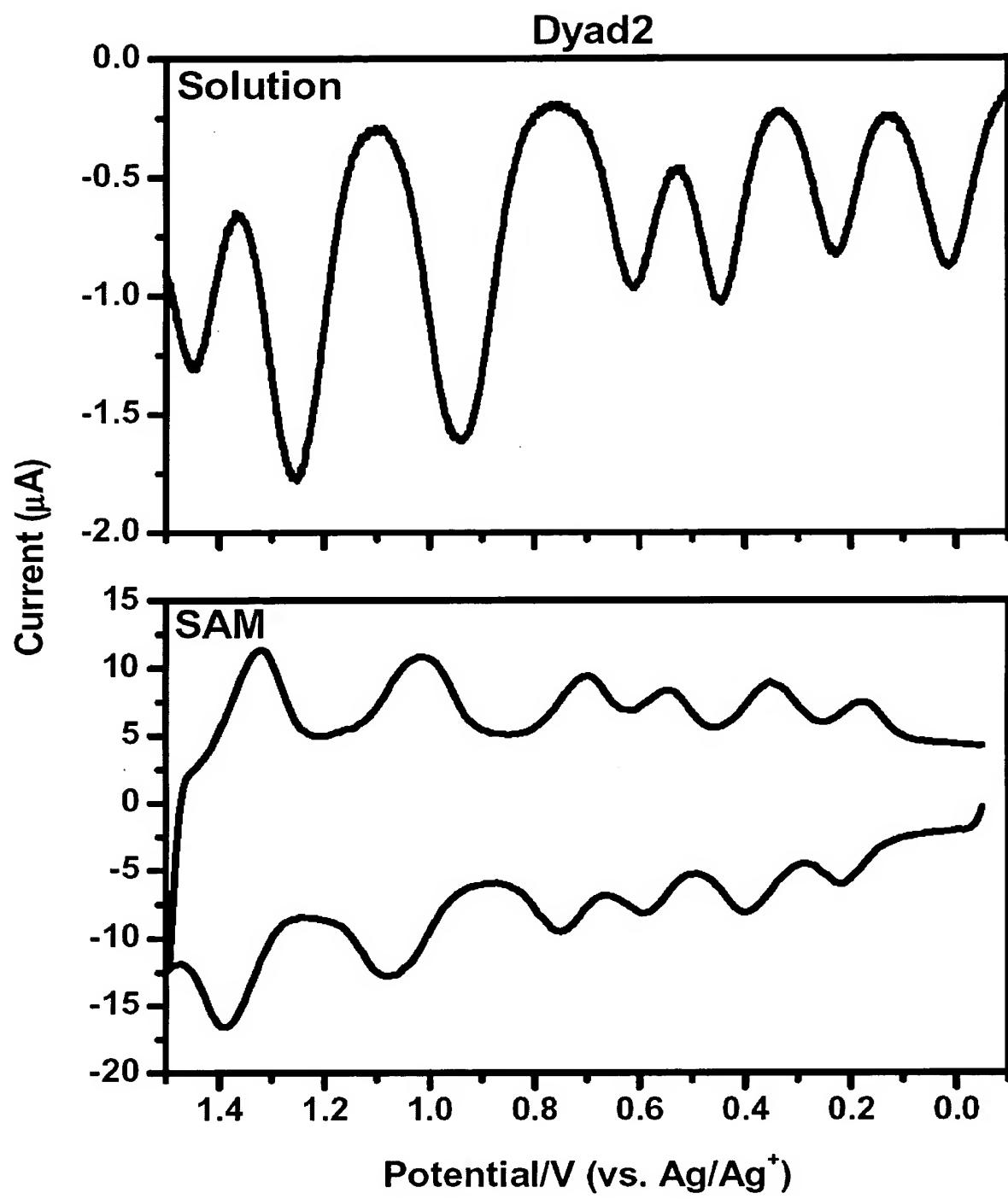
Scheme 13



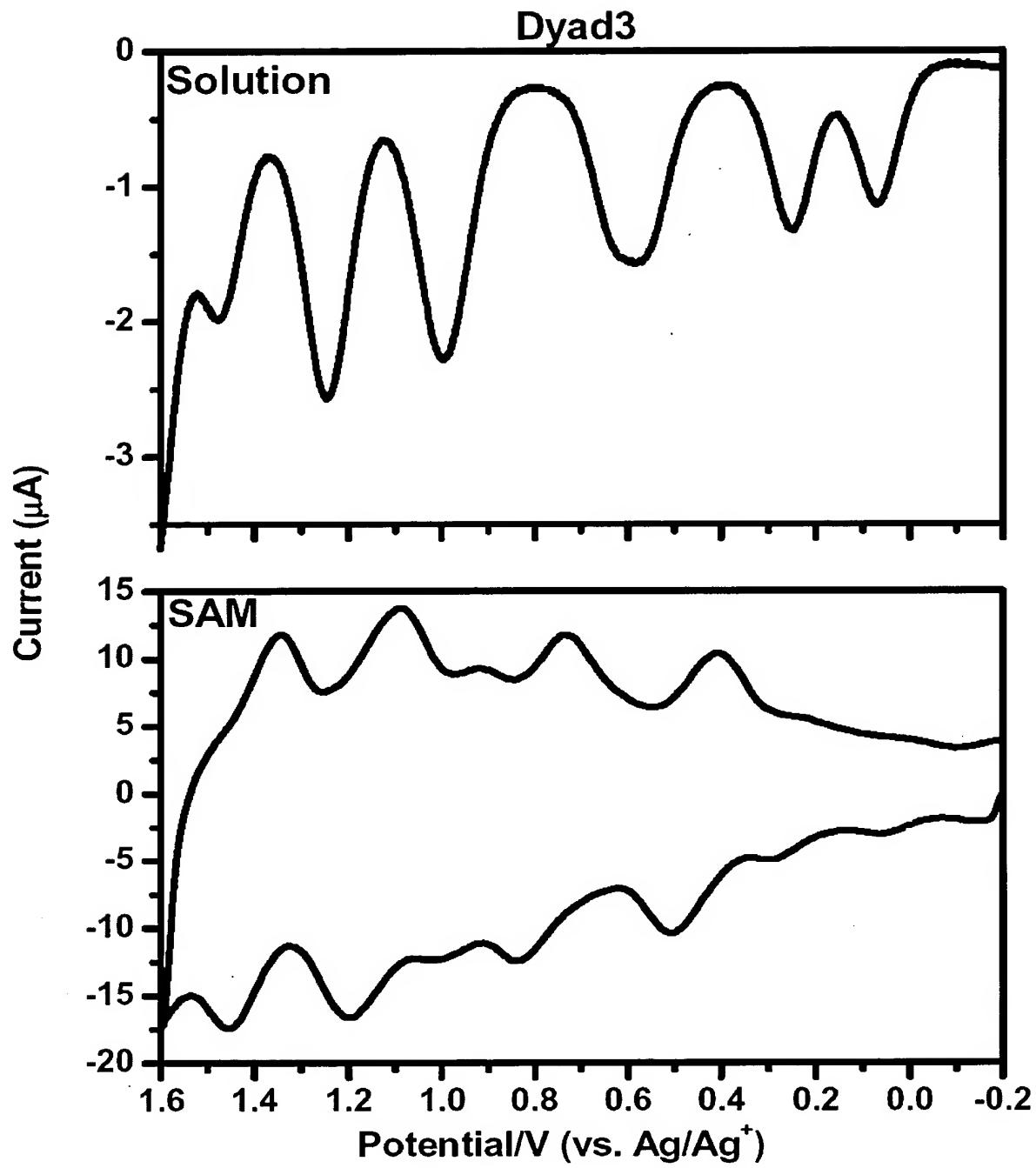
**Fig. 29**



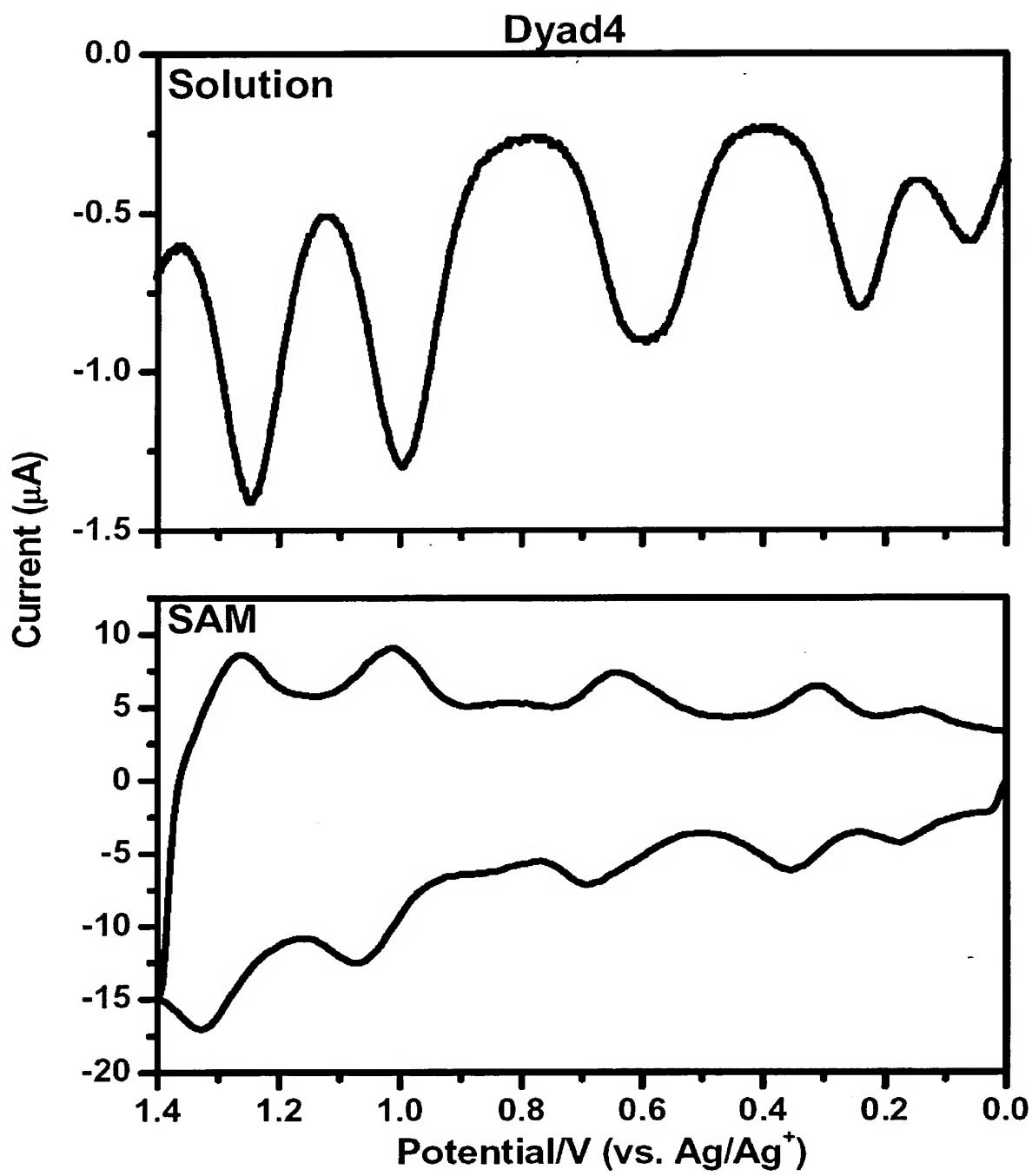
*Fig. 30*



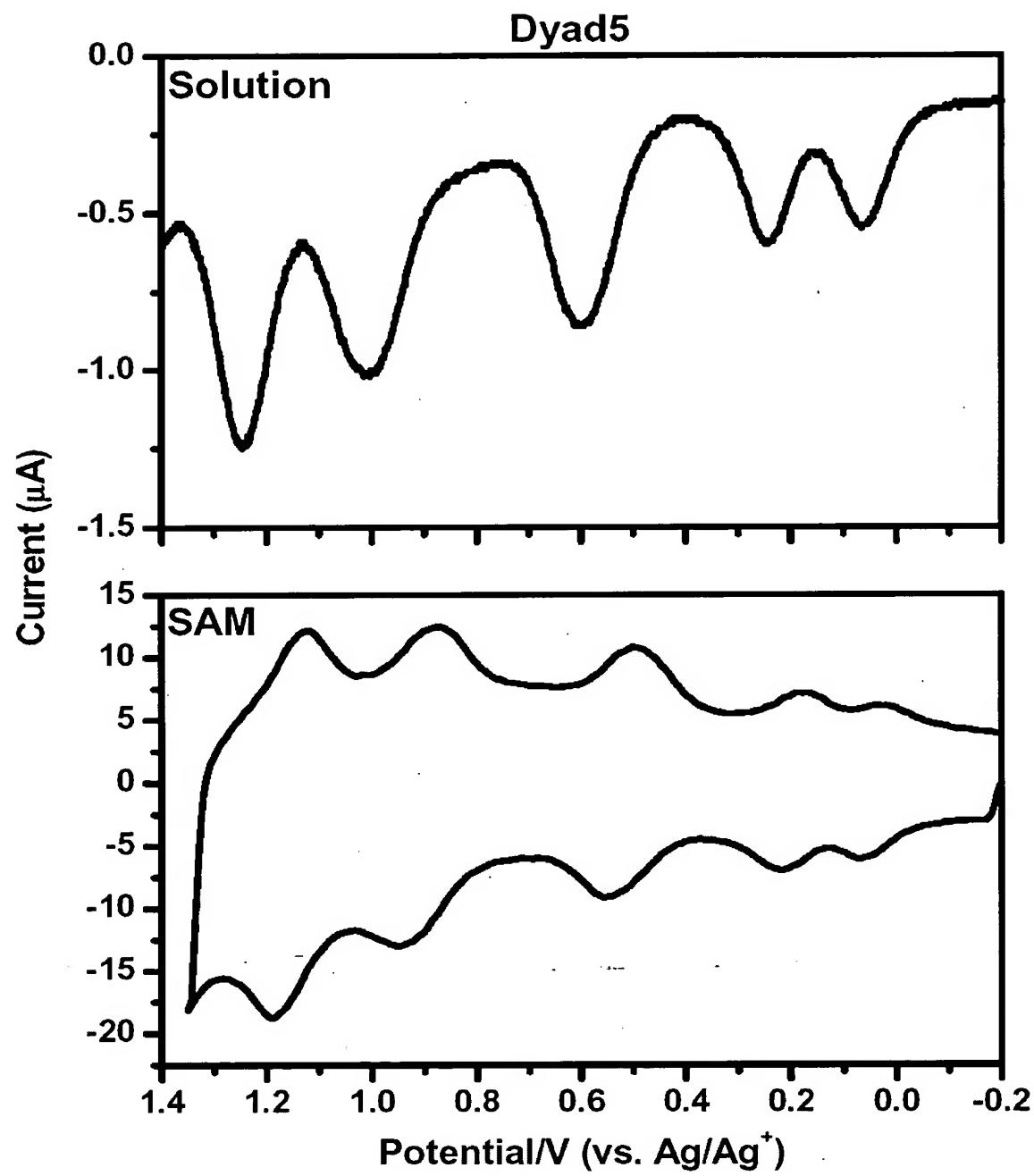
**Fig. 31**



**Fig. 32**



**Fig. 33**



**Fig. 34**